AF

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Before the Board of Patent Appeals and Interferences

In re Patent Application of — Conf. No.: 5465

WADA ET AL. — Atty. Ref.: FPP -1035-641

Serial No. 10/581,603 — TC/A.U.: 3761

Filed: June 5, 2006 — Examiner: C.L. Anderson

For: WATER-ABSORBING AGENT, MANUFACTURE METHOD THEREOF, AND ABSORBENT AND ABSORBENT ARTICLE MADE THEREFROM

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January 13, 2011

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REPLY BRIEF

This Reply Brief is in response to the Examiner's Answer mailed on November 15, 2010.

GROUNDS OF REJECTION

The Examiner acknowledges that Sun fails to teach the saline flow conductivity and the heat retention indicator called for in all of Claims 1-9 on appeal. It is argued by the Examiner that the temperature change on the surface of the water-absorbing resin is inherent to the water-absorbing resin and thus the water-absorbing agent of Sun will inherently exhibit the claimed heat retention indicators.

The Examiner then combines the teachings of the secondary reference to Beihoffer, which discloses a saline flow conductivity, with the teachings of Sun in an attempt to render obvious the novel combination of elements in Claims 1-9. Neither Sun nor Beihoffer recognizes the importance of a heat retention indicator in combination with a required level of absorption performance in a water-absorbing agent. Accordingly, there is no basis for combining the teachings of Beihoffer with Sun in an attempt to render obvious the novel combination of the four properties in the claims, namely, heat retention indicator, centrifuge retention capacity, absorbency under pressure and saline flow conductivity.

It is noted that Claim 1 specifically recites that the heat retention indicator 1 (maximum temperature decrease per minute 5 to 10 minutes after ten times swelling in a 0.90 wt.% sodium chloride at 50°C) is from 0 to 3.0°C/min. There is clearly no disclosure in Sun that the water absorbent agent would have such a heat retention indicator. Moreover, the combined teachings of Sun and Beihoffer clearly fail to disclose

the specific heat retention indicator, centrifuge retention capacity, absorbency under pressure and saline flow conductivity specifically recited in Claim 1 and dependent Claims 2-9.

With respect to Claims 2 and 6, the Examiner states that Sun discloses the water-absorbing agent with particles having diameters from 300-600 micrometers, with 0% being less than 150 micrometers (col. 5, lines 41-44). It is noted, however, that Sun merely states that a typical particle sized distribution ranges between about 20 and about 2000 micrometers, preferably between about 40 and about 890 micrometers and more preferably between about 90 and about 850 micrometers. There is no disclosure in Sun of the specific recitation in Claim 2 that the particles having diameters from 600 to 300 μm as specified by sieve classification account for 60 wt.% or more, and those less than 150 μm account for 3 wt.% or less, and a standard deviation of logarithm ($\sigma\zeta$) of particle sized distribution is from 0.250 to 0.400, as specifically recited in Claim 2.

Also, Sun fails to disclose the specific recitation in Claim 6 of the mass-average particle diameter (specified by sieve classification) being from 400-600 μm.

There is no disclosure in Sun or any other reference of the heat retention indicator 2 and the heat retention indicator 3 specifically recited in Claims 4 and 5, respectively.

RESPONSE TO ARGUMENT

In response to the Appellant's arguments, the Examiner has failed to establish a *prima facie* case of obviousness based on the water-absorbent agent disclosed in Sun.

There is absolutely nothing in the disclosure of Sun to suggest the specific heat retention indicator in Claim 1 and in dependent Claims 4 and 5.

Also, the Examiner has failed to establish a *prima facie* case of obviousness based on the combined teachings of Sun and Biehoffer with respect to the novel combination of elements in Claims 1-9, namely, the heat retention indicator, the centrifuge retention capacity, absorbency under pressure and saline flow conductivity.

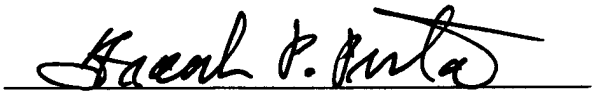
If the Examiner does not establish a *prima facie* case of obviousness, it is submitted that Appellants do not have the burden of establishing non-obviousness. It is only through hindsight, having the benefit of Appellants' disclosure, that the Examiner could apply the teachings of the references in the manner set forth in the final rejection.

CONCLUSION

In view of the arguments in the Appeal Brief and in the present Reply Brief, it is submitted that all of Claims 1-9 should be allowable over the teachings of the cited references. Accordingly, it is requested that the Examiner's decision finally rejecting Claims 1-9 be reversed.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 
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